Listing of Claims:

1. (Previously Presented) A radio network controller in a paging system that performs a paging processing for calling a mobile station in response to a paging command from a core network,

wherein a flag indicating whether or not said core network has the function of co-ordinating a packet service and a circuit service is added to said paging command,

and said radio network controller comprises:

determination means for determining whether or not said flag indicates that said co-ordinating function is present; and

paging processing means for performing said paging processing using one of a paging control channel (PCCH) and a dedicated control channel (DCCH) depending on the connection status between said core network and said radio network controller if said flag is determined as indicating the presence of said co-ordinating function.

2. (Previously Presented) A radio network controller according to Claim 1,

wherein said paging processing means comprises:

means for performing said paging processing using said paging control channel (PCCH) if the connection status between said core network and said radio network controller is connectionless; and

means for performing said paging processing using said dedicated control channel (DCCH) if the connection status between said core network and said radio network controller is connection oriented.

3. (Original) A radio network controller according to Claim 1, wherein said paging command is a paging message of the RANAP protocol.

4. (Previously Presented) A radio network controller according to Claim 1, wherein said paging command further includes a connection ID for identifying a connection between said radio network controller and a mobile station that is in a communication, so that

said paging processing means identifies the connection by said connection ID and performs said paging processing using the dedicated control channel (DCCH).

5. (Original) A radio network controller according to Claim 2, wherein said paging command is a paging message of the RANAP protocol.

6. (Previously Presented) A radio network controller according to Claim 2, wherein said paging command further includes a connection ID for identifying a connection between said radio network controller and a mobile station that is in a communication, so that said paging processing means identifies the connection by said connection ID and performs said paging processing using the dedicated control channel (DCCH).

7. (Previously Presented) A radio network controller according to Claim 3, wherein said paging command further includes a connection ID for identifying a connection between said radio network controller and a mobile station that is in a communication, so that said paging processing means identifies the connection by said connection ID and performs said paging processing using the dedicated control channel (DCCH).

8. (Previously Presented) A radio network controller according to Claim 5, wherein said paging command further includes a connection ID for identifying a connection between said radio network controller and a mobile station that is in a communication, so that said paging processing means identifies the connection by said connection ID and performs said paging processing using the dedicated control channel (DCCH).

9. (Previously Presented) A paging system that performs a paging processing for calling a mobile station from a radio network controller in response to a paging command from a core network,

wherein a flag indicating whether or not said core network has the function of co-ordinating a packet service and a circuit service is added to said paging command,

and said radio network controller comprises:

determination means for determining whether or not said flag indicates that said co-ordinating function is present; and

paging processing means for performing said paging processing using one of a paging control channel (PCCH) and a dedicated control channel (DCCH) depending on the connection status between said core network and said radio network controller if said flag is determined as indicating the presence of said co-ordinating function.

10. (Previously Presented) A paging system according to Claim 9,

wherein said paging processing means comprises:

means for performing said paging processing using said paging control channel (PCCH) if the connection status between said core network and said radio network controller is connectionless; and

means for performing said paging processing using said dedicated control channel (DCCH) if the connection status between said core network and said radio network controller is connection oriented.

11. (Original) A paging system according to Claim 9, wherein said paging command is a paging message of the RANAP protocol.

12. (Previously Presented) A paging system according to Claim 9, wherein said paging command further includes a connection ID for identifying a connection between said radio network controller and a mobile station that is in a communication, so that said paging processing means identifies the connection by said connection ID and performs said paging processing using the dedicated control channel (DCCH).

13. (Original) A paging system according to Claim 10, wherein said paging command is a paging message of the RANAP protocol.

14. (Previously Presented) A paging system according to Claim 10, wherein said paging command further includes a connection ID for identifying a connection between said radio network controller and a mobile station that is in a communication, so that said paging processing means identifies the connection by said connection ID and performs said paging processing using the dedicated control channel (DCCH).

15. (Previously Presented) A paging system according to Claim 11, wherein said paging command further includes a connection ID for identifying a connection between said radio network controller and a mobile station that is in a communication, so that said paging processing means identifies the connection by said connection ID and performs said paging processing using the dedicated control channel (DCCH).

16. (Previously Presented) A paging system according to Claim 13, wherein said paging command further includes a connection ID for identifying a connection between said radio network controller and a mobile station that is in a communication, so that said paging processing means identifies the connection by said connection ID and performs said paging processing using the dedicated control channel (DCCH).

17. (Previously Presented) A paging method that performs a paging processing for calling a mobile station from a radio network controller in response to a paging command from a core network,

wherein a flag indicating whether or not said core network has the function of co-ordinating a packet service and a circuit service is added to said paging command,

and said paging method comprises:

a determination step of determining at said radio network controller whether or not said flag indicates that said co-ordinating function is present; and

a paging processing step of performing said paging process at said radio network controller using one of a paging control channel (PCCH) and a dedicated control channel (DCCH) depending on the connection status between said core network and said radio network controller if said flag is determined as indicating the presence of said co-ordinating function.

18. (Previously Presented) A paging method according to Claim 17,

wherein said paging processing step comprises:

a step of performing said paging processing using said paging control channel (PCCH) if the connection status between said core network and said radio network controller is connectionless; and

a step of performing said paging processing using said dedicated control channel (DCCH) if the connection status between said core network and said radio network controller is connection oriented.

19. (Original) A paging method according to Claim 17, wherein said paging command is a paging message of the RANAP protocol.

20. (Previously Presented) A paging method according to Claim 17, wherein said paging command further includes a connection ID for identifying a connection between said radio network controller and a mobile station that is in a communication, so that the step of performing said paging processing identifies the connection by said connection ID and performs said paging processing using the dedicated control channel (DCCH).

21. (Original) A paging method according to Claim 18, wherein said paging command is a paging message of the RANAP protocol.

22. (Previously Presented) A paging method according to Claim 18, wherein said paging command further includes a connection ID for identifying a connection between said radio network controller and a mobile station that is in a communication, so that the step of performing said paging processing identifies the connection by said connection ID and performs said paging processing using the dedicated control channel (DCCH).

23. (Previously Presented) A paging method according to Claim 19, wherein said paging command further includes a connection ID for identifying a connection between said radio network controller and a mobile station that is in a communication, so that the step of performing said paging processing identifies the connection by said connection ID and performs said paging processing using the dedicated control channel (DCCH).

24. (Previously Presented) A paging method according to Claim 21, wherein said paging command further includes a connection ID for identifying a connection between said radio network controller and a mobile station that is in a communication, so that the step of performing said paging processing identifies the connection by said connection ID and performs said paging processing using the dedicated control channel (DCCH).

25. (Withdrawn) A paging system that performs a paging processing for simultaneously a mobile station from a radio network controller in response to a paging command from a core network,

wherein said paging command includes a search-not-required flag indicating whether a search for a common ID for identifying said mobile station is required or not required in said radio network controller.

26. (Withdrawn) A paging system according to Claim 25, wherein said radio network controller comprises paging processing means for performing said paging processing using one of a paging control channel and a dedicated control channel depending on whether or not a mobile switching center of said core network has the function of coordinating a packet service and a circuit service, and

wherein said paging processing means searches for said common ID if the mobile switching center of said core network does not have the function of co-ordinating the packet service and the circuit service.

27. (Withdrawn) A paging system according to Claim 25, wherein said radio network controller comprises paging processing means for performing said paging processing using one of a paging control channel and a dedicated control channel depending on whether or not a mobile switching center of said core network has the function of coordinating a packet service and a circuit service, and

wherein said paging processing means performs said paging processing using one of the paging control channel and the dedicated control channel depending on the connection status between said core network and said radio network controller if the mobile switching center of said core network has the function of co-ordinating the packet service and the circuit service.

28.-30. (Canceled).

31. (Withdrawn) A paging system according to Claim 25, wherein said search-not-required flag is set to "required" if the mobile switching center of said core network does not have the function of co-ordinating a packet service and a circuit service.

32. (Withdrawn) A paging system according to Claim 26, wherein said search-not-required flag is set to "required" if the mobile switching center of said core network does not have the function of co-ordinating a packet service and a circuit service.

33. (Withdrawn) A paging system according to Claim 27, wherein said search-not-required flag is set to "required" if the mobile switching center of said core network does not have the function of co-ordinating a packet service and a circuit service.

34. (Withdrawn) A paging system according to Claim 25, wherein said search-not-required flag is set to "not required" if the mobile switching center of said core network has the function of co-ordinating a packet service and a circuit service and if the connection status between said core network and said radio network controller is connectionless.

35. (Withdrawn) A paging system according to Claim 26, wherein said search-not-required flag is set to "not required" if the mobile switching center of said core network has the function of co-ordinating a packet service and a circuit service and if the connection status between said core network and said radio network controller is connectionless.

36. (Withdrawn) A paging system according to Claim 27, wherein said search-not-required flag is set to "not required" if the mobile switching center of said core network has the function of co-ordinating a packet service and a circuit service and if the connection status between said core network and said radio network controller is connectionless.

37. (Withdrawn) A paging system according to Claim 34, wherein said paging control channel (PCCH) is used in said paging processing if said search-not-required flag indicates not required.

38. (Withdrawn) A paging system according to Claim 35, wherein said paging control channel (PCCH) is used in said paging processing if said search-not-required flag indicates not required.

39. (Withdrawn) A paging system according to Claim 36, wherein said paging control channel (PCCH) is used in said paging processing if said search-not-required flag indicates not required.

40. (Withdrawn) A paging system according to Claim 25, wherein said search-not-required flag is set to "required" if the mobile switching center of said core network has the function of co-ordinating the packet service and the circuit service and if the connection status between said core network and said radio network controller is connectionless.

41. (Withdrawn) A paging system according to Claim 26, wherein said search-not-required flag is set to "required" if the mobile switching center of said core network has the function of co-ordinating the packet service and the circuit service and if the connection status between said core network and said radio network controller is connectionless.

42. (Withdrawn) A paging system according to Claim 27, wherein said search-not-required flag is set to "required" if the mobile switching center of said core network has the function of co-ordinating the packet service and the circuit service and if the connection status between said core network and said radio network controller is connectionless.

43. (Withdrawn) A paging system according to Claim 40, wherein one of said paging control channel (PCCH) and said dedicated control channel (DCCH) is used in said paging processing if said search-not-required flag indicates required.

44. (Withdrawn) A paging system according to Claim 41, wherein one of said paging control channel (PCCH) and said dedicated control channel (DCCH) is used in said paging processing if said search-not-required flag indicates required.

45. (Withdrawn) A paging system according to Claim 42, wherein one of said paging control channel (PCCH) and said dedicated control channel (DCCH) is used in said paging processing if said search-not-required flag indicates required.

46. (Withdrawn) A paging system according to Claim 27, wherein said dedicated control channel (DCCH) is used in said paging processing if the connection status between said core network and said radio network controller is connection oriented.

47. (Withdrawn) A paging system according to Claim 27, wherein said paging command further includes a connection ID for identifying a connection between said radio network controller and a mobile station that is in a communication, so that said paging

processing means identifies the connection by said connection ID and performs said paging processing using said dedicated control channel (DCCH).

48. (Withdrawn) A paging method that performs a paging processing for simultaneously calling a mobile station from a radio network controller in response to a paging command from a core network,

wherein said paging command includes a search-not-required flag indicating whether a search for a common ID for identifying said mobile station is required or not required in said radio network controller.

49. (Withdrawn) A paging method according to Claim 48, wherein said paging method comprises a paging processing step of performing, in said radio network controller, said paging processing using one of a paging control channel and a dedicated control channel depending on whether a mobile switching center of said core network has the function of co-ordinating a packet service and a circuit service, said paging processing step searches for said common ID if the mobile switching center of said core network does not have the function of co-ordinating the packet service and the circuit service.

50. (Withdrawn) A paging method according to Claim 48, wherein said paging method comprises a paging processing step of performing, in said radio network controller, said paging processing using one of a paging control channel and a dedicated control channel depending on whether a mobile switching center of said core network has the function of co-ordinating a packet service and a circuit service, said paging processing step performs said paging processing using one of the paging control channel and the dedicated control channel depending on the connection status between said core network and said radio network controller if the mobile switching center of said core network has the function of co-ordinating the packet service and the circuit service.

51.–53 (Canceled).

54. (Withdrawn) A paging method according to Claim 48, wherein said search-not-required flag is set to "required" if the mobile switching center of said core network does not have the function of co-ordinating the packet service and the circuit service.

55. (Withdrawn) A paging method according to Claim 49, wherein said search-not-required flag is set to "required" if the mobile switching center of said core network does not have the function of co-ordinating the packet service and the circuit service.

56. (Withdrawn) A paging method according to Claim 50, wherein said search-not-required flag is set to "required" if the mobile switching center of said core network does not have the function of co-ordinating the packet service and the circuit service.

57. (Withdrawn) A paging method according to Claim 48, wherein said search-not-required flag is set to "not required" if the mobile switching center of said core network has the function of co-ordinating the packet service and the circuit service and if the connection status between said core network and said radio network controller is connectionless.

58. (Withdrawn) A paging method according to Claim 49, wherein said search-not-required flag is set to "not required" if the mobile switching center of said core network has the function of co-ordinating the packet service and the circuit service and if the connection status between said core network and said radio network controller is connectionless.

59. (Withdrawn) A paging method according to Claim 50, wherein said search-not-required flag is set to "not required" if the mobile switching center of said core network has the function of co-ordinating the packet service and the circuit service and if the connection status between said core network and said radio network controller is connectionless.

60. (Withdrawn) A paging method according to Claim 57, wherein said paging control channel (PCCH) is used in said paging processing if said search-not-required flag indicates not required.

61. (Withdrawn) A paging method according to Claim 58, wherein said paging control channel (PCCH) is used in said paging processing if said search-not-required flag indicates not required.

62. (Withdrawn) A paging method according to Claim 59, wherein said paging control channel (PCCH) is used in said paging processing if said search-not-required flag indicates not required.

63. (Withdrawn) A paging method according to Claim 48, wherein said search-not-required flag is set to "required" if the mobile switching center of said core network has the function of co-ordinating the packet service and the circuit service and if the connection status between said core network and said radio network controller is connectionless.

64. (Withdrawn) A paging method according to Claim 49, wherein said search-not-required flag is set to "required" if the mobile switching center of said core network has the function of co-ordinating the packet service and the circuit service and if the connection status between said core network and said radio network controller is connectionless.

65. (Withdrawn) A paging method according to Claim 50, wherein said search-not-required flag is set to "required" if the mobile switching center of said core network has the function of co-ordinating the packet service and the circuit service and if the connection status between said core network and said radio network controller is connectionless.

66. (Withdrawn) A paging method according to Claim 63, wherein one of said paging control channel (PCCH) and said dedicated control channel (DCCH) is used in said paging processing if said search-not-required flag indicates required.

67. (Withdrawn) A paging method according to Claim 64, wherein one of said paging control channel (PCCH) and said dedicated control channel (DCCH) is used in said paging processing if said search-not-required flag indicates required.

68. (Withdrawn) A paging method according to Claim 65, wherein one of said paging control channel (PCCH) and said dedicated control channel (DCCH) is used in said paging processing if said search-not-required flag indicates required.

69. (Withdrawn) A paging method according to Claim 50, wherein said dedicated control channel (DCCH) is used in said paging processing if the connection status between said core network and said radio network controller is connection oriented.

70. (Withdrawn) A paging method according to Claim 50, wherein said paging command further includes a connection ID for identifying a connection between said radio network controller and a mobile station that is in a communication, so that said paging processing step identifies the connection by said connection ID and performs said paging processing using said dedicated control channel (DCCH).

71. (Withdrawn) A radio network controller in a paging system that performs a paging processing for simultaneously calling a mobile station in response to a paging command from a core network,

wherein said paging command includes a search-not-required flag indicating whether a search for common ID of the mobile station simultaneously called by said radio network controller is required or not required,

and said radio network controller includes judging means for judging whether the search for the common ID is required or not required on the basis of contents of said search-not-required flag.

72. (Withdrawn) A paging system according to Claim 25, wherein said radio network controller does not carry out the search for said common ID if said search-not-required flag indicates not required.

73. (Withdrawn) A paging system according to Claim 25, wherein if a mobile switching center of said core network has the function of co-ordinating a packet service and a circuit service, said search-not-required flag is set to "not required" in said mobile switching center, said radio network controller judges that said search-not-required flag is "not required" so as to do not carry out the search for said common ID.

74. (Withdrawn) A paging system according to Claim 73, wherein said radio network controller performs said paging processing using a paging control channel if said search-not-required flag indicates not required.

75. (Withdrawn) A radio network controller according to Claim 71, wherein said radio network controller does not carry out the search for said common ID if said search-not-required flag indicates not required.

76. (Withdrawn) A paging system according to Claim 75, wherein said radio network controller performs said paging processing using a paging control channel if said search-not-required flag indicates not required.

77. (Withdrawn) A paging method according to claim 48, wherein said radio network controller does not carry out the search for said common ID if said search-not-required flag indicates not required.

78. (Withdrawn) A paging method according to Claim 48, wherein if a mobile switching center of said core network has the function of co-ordinating a packet service and a circuit service, said search-not-required flag is set to "not required" in said mobile switching center, said radio network controller judges that said search-not-required flag is "not required" so as to do not carry out the search for said common ID.

79. (Withdrawn) A paging method according to Claim 78, wherein said radio network controller performs said paging processing using a paging control channel if said search-not-required flag indicates not required.

80. (Previously Presented) A radio network controller in a paging system that performs a paging processing for calling a mobile station in response to a paging command from a core network,

wherein a flag indicating whether or not said core network has the function of co-ordinating a packet service and a circuit service is added to said paging command,

and said radio network controller comprises:

a determination unit configured to determine whether or not said flag indicates that said co-ordinating function is present; and

a paging processing configured to perform said paging processing using one of a paging control channel (PCCH) and a dedicated control channel (DCCH) depending on the connection status between said core network and said radio network controller if said flag is determined as indicating the presence of said co-ordinating function.

81. (Previously Presented) A radio network controller according to Claim 80, wherein said paging processing unit comprises:

a first performing unit configured to perform said paging processing using said paging control channel (PCCH) if the connection status between said core network and said radio network controller is connectionless; and

a second performing unit configured to perform said paging processing using said dedicated control channel (DCCH) if the connection status between said core network and said radio network controller is connection oriented.

82. (Previously Presented) A radio network controller according to Claim 80, wherein said paging command is a paging message of the RANAP protocol.

83. (Previously Presented) A radio network controller according to Claim 80, wherein said paging command further includes a connection ID for identifying a connection between said radio network controller and a mobile station that is in a communication, so that said paging processing unit identifies the connection by said connection ID and performs said paging processing using the dedicated control channel (DCCH).

84. (Previously Presented) A radio network controller according to Claim 81, wherein said paging command is a paging message of the RANAP protocol.

85. (Previously Presented) A radio network controller according to Claim 81, wherein said paging command further includes a connection ID for identifying a connection between said radio network controller and a mobile station that is in a communication, so that said paging processing unit identifies the connection by said connection ID and performs said paging processing using the dedicated control channel (DCCH).

86. (Previously Presented) A radio network controller according to Claim 82, wherein said paging command further includes a connection ID for identifying a connection between said radio network controller and a mobile station that is in a communication, so that said paging processing unit identifies the connection by said connection ID and performs said paging processing using the dedicated control channel (DCCH).

87. (Previously Presented) A radio network controller according to Claim 84, wherein said paging command further includes a connection ID for identifying a connection

between said radio network controller and a mobile station that is in a communication, so that said paging processing unit identifies the connection by said connection ID and performs said paging processing using the dedicated control channel (DCCH).

88. (Previously Presented) A paging system that performs a paging processing for calling a mobile station from a radio network controller in response to a paging command from a core network,

wherein a flag indicating whether or not said core network has the function of co-ordinating a packet service and a circuit service is added to said paging command,

and said radio network controller comprises:

a determination unit configured to determine whether or not said flag indicates that said co-ordinating function is present; and

a paging processing unit configured to perform said paging processing using one of a paging control channel (PCCH) and a dedicated control channel (DCCH) depending on the connection status between said core network and said radio network controller if said flag is determined as indicating the presence of said co-ordinating function.

89. (Previously Presented) A paging system according to Claim 88,

wherein said paging processing unit comprises:

a first performing unit configured to perform said paging processing using said paging control channel (PCCH) if the connection status between said core network and said radio network controller is connectionless; and

a second performing unit configured to perform said paging processing using said dedicated control channel (DCCH) if the connection status between said core network and said radio network controller is connection oriented.

90. (Previously Presented) A paging system according to Claim 88, wherein said paging command is a paging message of the RANAP protocol.

91. (Previously Presented) A paging system according to Claim 88, wherein said paging command further includes a connection ID for identifying a connection between said radio network controller and a mobile station that is in a communication, so that said paging

processing unit identifies the connection by said connection ID and performs said paging processing using the dedicated control channel (DCCH).

92. (Previously Presented) A paging system according to Claim 89, wherein said paging command is a paging message of the RANAP protocol.

93. (Previously Presented) A paging system according to Claim 89, wherein said paging command further includes a connection ID for identifying a connection between said radio network controller and a mobile station that is in a communication, so that said paging processing unit identifies the connection by said connection ID and performs said paging processing using the dedicated control channel (DCCH).

94. (Previously Presented) A paging system according to Claim 90, wherein said paging command further includes a connection ID for identifying a connection between said radio network controller and a mobile station that is in a communication, so that said paging processing unit identifies the connection by said connection ID and performs said paging processing using the dedicated control channel (DCCH).

95. (Previously Presented) A paging system according to Claim 92, wherein said paging command further includes a connection ID for identifying a connection between said radio network controller and a mobile station that is in a communication, so that said paging processing unit identifies the connection by said connection ID and performs said paging processing using the dedicated control channel (DCCH).